

IN THE CLAIMS

1. (PREVIOUSLY PRESENTED) A non-aggregating, non-immunogenic anuclear cellular composition consisting of:

- a) a mammalian anuclear cell having a cell surface and antigenic determinants on said surface;
- b) a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said surface is blocked by said covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer.

2. (PREVIOUSLY PRESENTED) A non-aggregating, non-immunogenic nuclear cellular composition in which at least 25% by number of nuclear cells in said composition remain viable for 96 hours consisting of:

- a) a mammalian nuclear cell having a cell surface and antigenic determinants on said surface;
- b) a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said surface is blocked by said covalently

bonded hydrophilic, biocompatible, non-immunogenicity
providing compound or polymer.

3. (PREVIOUSLY PRESENTED) A non-aggregating, non-immunogenic nuclear cellular composition having insufficient amounts of toxic materials within said composition to be toxic to nuclear cells within said composition consisting essentially of:

- a) a mammalian nuclear cell having a cell surface and antigenic determinants on said surface;
- b) a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said surface is blocked by said covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer.

4. (PREVIOUSLY PRESENTED) A non-aggregating, non-immunogenic anuclear or nuclear cellular composition consisting of:

- c) a mammalian anuclear or nuclear cell having a cell surface and antigenic determinants on said surface;
- d) a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said anuclear or nuclear cell surface is blocked by said covalently

bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer, said composition being free of any by-products from the covalent attachment of said hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said anuclear or nuclear cell surface.

5. (PREVIOUSLY PRESENTED) A non-aggregating, non-immunogenic cellular composition having insufficient amounts of toxic materials within said composition to be toxic to cells within said composition consisting essentially of:

- e) a mammalian nuclear cell having a cell surface and antigenic determinants on said surface;
- f) a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said surface is blocked by said covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer.

6. (PREVIOUSLY PRESENTED) A viable, non-aggregating, non-immunogenic cellular composition consisting essentially of:

- g) a mammalian nuclear cell having a cell surface and antigenic determinants on said surface;

h) a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said surface is blocked by said covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer.

7. (PREVIOUSLY PRESENTED) A non-immunogenic cellular composition consisting essentially of:

i) a mammalian nuclear cell having a cell surface and antigenic determinants on said surface;
a sufficient amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer covalently attached to said surface so that recognition of said antigenic determinants on said surface is blocked by said covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer.

8. (ORIGINAL) The cellular composition of claim 1 wherein said hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is a polyalkylene glycol.

9. (ORIGINAL) The cellular composition of claim 1 wherein said hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is a methoxypolyalkylene glycol.

10. (ORIGINAL) The cellular composition of claim 1 wherein said hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is a dextran.

11. (ORIGINAL) The cellular composition of claim 1 wherein said hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is Ficoll.

12. (ORIGINAL) The cellular composition of claim 1 wherein said hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is arabinogalactan.

13. (ORIGINAL) The cellular composition of claim 1 wherein said linking moieties are covalently bonded to said antigenic determinants on said cell surface.

14. (PREVIOUSLY PRESENTED) The cellular composition of claim 1 wherein said cell is an anuclear cell and the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is covalently bonded to the nuclear cell through a unit derived from reaction of a cyanuric chloride linking group on the

covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to the cell surface.

15. (PREVIOUSLY PRESENTED) The cellular composition of claim 1 wherein said anuclear cell is a red blood cell.

16. (ORIGINAL) The cellular composition of claim 10 wherein the antigenic determinants comprise a blood group antigenic determinants.

17. (PREVIOUSLY PRESENTED) The cellular composition of claim 1 wherein said anuclear cell is a platelet.

18. (PREVIOUSLY PRESENTED) The cellular composition of claim 2 wherein said cell is a lymphocyte and the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is covalently bonded to the nuclear cell through a unit derived from reaction of a cyanuric chloride linking group on the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to the cell surface.

19. (PREVIOUSLY PRESENTED) The cellular composition of claim 2 wherein linking moieties covalently attach the hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said surface, said linking moieties are covalently

attached to said antigenic determinants on said cell surface and said nucleated cell is a vascular endothelial cell.

20. (PREVIOUSLY PRESENTED) The cellular composition of claim 2 wherein linking moieties covalently attach the hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said surface, said linking moieties are covalently attached to said antigenic determinants on said cell surface and said nucleated cell is a hepatic cell.

21. (PREVIOUSLY PRESENTED) The cellular composition of claim 2 wherein linking moieties covalently attach the hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said surface, said linking moieties are covalently attached to said antigenic determinants on said cell surface and said nucleated cell is a neuronal cell.

22. (PREVIOUSLY PRESENTED) The cellular composition of claim 2 wherein linking moieties covalently attach the hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said surface, said linking moieties are covalently attached to said antigenic determinants on said cell surface and said nucleated cell is a pancreatic cell.

23. (PREVIOUSLY PRESENTED)The cellular composition of claim 2 wherein linking moieties covalently attach the hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said surface, said linking moieties are covalently attached to said antigenic determinants on said cell surface and said nucleated cell is an epithelial cell.

24. (PREVIOUSLY PRESENTED) A method of producing a non-immunogenic mammalian cell, said method comprising:

covalently attaching an amount of hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to the cell surface, directly or by means of a linking moiety, so that said hydrophilic, biocompatible, nonimmunogenicity providing compound or polymer blocks recognition of antigenic determinants on the cell surface and yields a non-immunogenic cell.

25. (PREVIOUSLY PRESENTED)The method of claim 24 wherein linking moieties covalently attach the hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to said surface, said linking moiety is covalently bonded to said antigenic determinants on said cell surface.

26. (ORIGINAL) The method of claim 24 wherein said cell is a red blood cell.

27. (CANCELLED)

28, (CURRENTLY AMENDED) The ~~method~~ cellular composition of claim 21 wherein said cell is part of a tissue or organ and the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is covalently bonded to the nuclear cell through a unit derived from reaction of a cyanuric chloride linking group on the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to the cell surface.

29. (CANCELLED)

30. (CANCELLED)

31. (PREVIOUSLY PRESENTED) The cellular composition of claim 1 wherein said cell is a platelet and the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer is covalently bonded to the nuclear cell through a unit derived from reaction of a cyanuric chloride linking group on the covalently bonded hydrophilic, biocompatible, non-immunogenicity providing compound or polymer to the cell surface.

32.-52. (CANCELLED)

ORIGINAL ISSUES

- 1) Claims 2-7, 18-21, 23-25, 28 and 31 have been rejected under 35 U.S.C. 102(e) as anticipated by Desai et al. (U.S. Patent No. 5,578,442).
- 2) Claims 1, 4, 8, 10-16, 24 and 26 have been rejected under 35 U.S.C. 102(b) as anticipated by Francis et al. (WO 95/06058).
- 3) Claims 1-26, 28 and 31 have been rejected under 35 U.S.C. 103(a) as obvious over the combination of Desai et al. in view of Francis et al.
- 4) Claim 28 has been rejected under 35 USC 112, second paragraph as having an improper dependency from claim 21.

GROUPING OF CLAIMS

The following grouping of claims is made in compliance with the requirements of 37 C.F.R. 1.191 for the content of an Appeal Brief. The following grouping of claims is made to expedite this Appeal and narrow issues, and is not intended to waive or limit the right of the Applicants to enforce and defend claims separately, even though they are grouped for convenience in this Appeal.

With Respect to the Issues Under 35 U.S.C. 112

Claim 28 stands by itself and has been amended in the exact manner suggested by the Examiner to remove this basis of rejection. That issue is now believed to be moot.

With Respect to Issues of Anticipation Under 35 USC 102(b) by Desai et al. (U.S. Patent No. 5,578,442)

Claims 2-7 and 24 shall stand or fall with the patentability of claim 2.

Claims 18, 28 and 31 shall stand or fall with the patentability of claim 18, this claim specifically reciting a linking group not specifically recited in earlier claims.

Claims 19-23 and 25 shall stand or fall together with the patentability of claim 19, based upon the recitation of the attachment of the covalent bond directly to the antigenic determinants.

With Respect to Issues Rejecting Claims 1, 4, 8, 10-16, 24 and 26 under 35 U.S.C. 102(b) As Anticipated by Francis et al. (WO 95/06058)

Claims 1, 8, 15, 24 and 26 shall stand or fall with the patentability of claim 1.

Claim 4 shall stand or fall by itself, this claim reciting the absence of toxic by-products, a limitation not present in other claims.

Claim 10 and 16 shall stand or fall with the patentability of claim 10, reciting a specific blocking group.

AMENDMENT

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Claim 11 shall stand or fall by itself, reciting a specific blocking group.

Claim 12 shall stand or fall by itself, reciting a specific blocking group.

Claim 13 shall stand or fall by itself, reciting a specific position of attachment with regard to the cell.

Claim 14 shall stand or fall by itself, reciting a specific linking group.

With Respect to Issues Rejecting Claims 1-26, 28 and 31 Under 35 U.S.C. 103(a) as obvious over the combination of Desai et al. in view of Francis et al.

Claims 1, 3, 8, 15, 17, 24, 25 and 26 shall stand or fall with the patentability of claim 1.

Claims 2 and 9 shall stand or fall with the patentability of claim 2, reciting a specific degree and test for stability.

Claim 4 shall stand or fall by itself, this claim reciting the absence of toxic by-products, a limitation not present in other claims.

Claims 5, 6 and 7 shall stand or fall with the patentability of claim 5, this claim differing from claim 1 in reciting a nuclear cell.

Claim 10 and 16 shall stand or fall with the patentability of claim 10, reciting a specific blocking group.

Claim 11 shall stand or fall by itself, reciting a specific blocking group.

Claim 12 shall stand or fall by itself, reciting a specific blocking group.

Claim 13 and 19-23 shall stand or fall with the patentability of claim 13, reciting a specific position of attachment with regard to the cell.

Claim 14 shall stand or fall by itself, reciting a specific linking group.

Claim 18 shall stand or fall by itself, reciting a specific position of attachment to the cell surface.